

Claims

1. A mobile telephone apparatus, said mobile telephone apparatus receiving information
5 transmitted for display on said mobile telephone apparatus, said mobile telephone
apparatus comprising:
 - a display surface for displaying the received information in a visually partitioned
manner, said visually partitioned information being presented on said display in at least
two regions;
 - 10 a keypad containing keys, each of said keys corresponding to at most a single
region of said display, wherein each region is associated with at least one of the keys in
the keypad and represents a choice of an option that may be selected by selecting the
associated key, and
 - a processor for performing an action associated with said choice of an option,
15 said action triggered by the selection of the associated key.
2. The mobile telephone apparatus of claim 1 wherein the display is organized in a
configuration that corresponds to a configuration of the keys on the keypad.
- 20 3. The mobile telephone apparatus of claim 1, wherein each region is associated with a
service option for a service and selecting the selected key results in a request for the
service.
4. The mobile telephone apparatus of claim 1, wherein each region contains a graphical
25 element that visually represents a choice.
5. The mobile telephone apparatus of claim 4, wherein the regions contain text.
6. The mobile telephone apparatus of claim 1, wherein the regions contain text.
- 30 7. The mobile telephone apparatus of claim 1 wherein new information associated with
the selected key on the keypad is displayed following said triggering of an event.

8. The mobile telephone apparatus of claim 7 wherein the new information that is displayed on the display is visually partitioned into regions that are each associated with respective ones of the keys on the keypad.

5 9. The mobile telephone apparatus of claim 1, wherein said information is displayed on said display displays in at least five regions.

10 10. The mobile telephone apparatus of claim 1, wherein said information is displayed on said display displays in nine regions associated with respective keys numbered one through nine.

11. The mobile telephone apparatus of claim 1, wherein each of the regions contains a border for visually delimiting the regions.

15 12. The mobile telephone apparatus of claim 1, wherein the regions occupy substantially all of the display.

20 13. The mobile telephone apparatus of claim 1, wherein each region is associated exclusively with a single one of the keys in the keypad.

14. The mobile telephone apparatus of claim 1, wherein the keypad is a virtual keypad displayed on said display surface.

25 15. The mobile telephone apparatus of claim 14, wherein the keys are selected via a touch screen.

30 16. The mobile telephone apparatus of claim 1, further comprising:
a navigational element used to switch focus between displayed regions on the display surface.

17. The mobile telephone apparatus of claim 16, wherein said navigational element is a joystick.

18. The mobile telephone apparatus of claim 16, wherein said navigational element is a joypad.

5 19. The mobile telephone apparatus of claim 16 wherein said keys appear in a circular shape and said navigational element is located inside of said circular shape.

20. The mobile telephone apparatus of claim 1 wherein said keys appear in a circular shape.

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21. The mobile telephone apparatus of claim 1 wherein said keys appear in a partially circular shape.

15 22. The mobile telephone apparatus of claim 1 wherein said keys appear in a first and second vertically-aligned and horizontally opposite columns on either side of said display surface, said first and second vertically-aligned columns appearing on respective edges of said mobile telephone apparatus.

20 23. The mobile telephone apparatus of claim 22 wherein said keys include keys bearing the numbers 1, 2 3, 4 and 5 appear in said first vertical column and keys bearing the numbers 6, 7, 8, 9 and 10 appear in said second vertical column.

25 24. The mobile telephone apparatus of claim 1 wherein said keys appear in two vertically-aligned and horizontally opposite columns, said vertically-aligned columns appearing on respective sides of said mobile telephone apparatus.

25. The mobile telephone apparatus of claim 1 wherein more than one number appears on at least one key of said keypad.

30 26. The mobile telephone apparatus of claim 1 wherein said keypad further comprises:
an arrangement of said keys in a grid pattern, said grid pattern including at least four rows of at least 3 keys each and at least three columns.

27. The mobile telephone apparatus of claim 26 wherein said grid pattern includes keys bearing the numbers 1, 2 and 3 on separate consecutive keys from left to right in a first row, keys bearing the numbers 4, 5 and 6 on separate consecutive keys from left to right in a second row appearing below said first row, keys bearing the numbers 7, 8 and 9 on separate consecutive keys from left to right in a third row appearing below said second row, and a key bearing the number 0 appearing on a fourth row of keys on the center key, said fourth row appearing below said third row.

28. The mobile telephone apparatus of claim 27 wherein the said first row, second row, third row and fourth row are horizontally aligned so that the respective first keys in each row form a column vertically aligned to a column composed of the respective second keys in each row, and so that the respective second keys in each row form a column vertically aligned to a column composed of the respective third keys in each row.

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29. The mobile telephone apparatus of claim 26 wherein said keys are of a non-uniform size.

30. The mobile telephone apparatus of claim 26 wherein said grid appears to the side of said display surface.

31. The mobile telephone apparatus of claim 1 wherein said keyboard includes a QWERTY keyboard.

32. The mobile telephone apparatus of claim 31, further comprising:
a navigational element used to switch focus between displayed regions on the display surface.

33. The mobile telephone apparatus of claim 1 wherein said keypad consists of two keys.

34. The mobile telephone apparatus of claim 1 wherein said keypad consists of three keys.

35. The mobile telephone apparatus of claim 1 wherein said regions are separate icons
5 appearing on said display surface.

36. The mobile telephone apparatus of claim 1 wherein said regions are partitioned based on shading differences on said display surface.

10 37. An electronic apparatus receiving information transmitted for display on said electronic apparatus, said electronic apparatus comprising:

a display surface for displaying the received information in a visually partitioned manner, said visually partitioned information being presented on said display in at least two regions;

15 a keypad containing keys, each of said keys corresponding to at most a single region of said display, wherein each region is associated with at least one of the keys in the keypad and represents a choice of an option that may be selected by selecting the associated key; and

a processor for performing an action associated with said choice of an option,
20 said action triggered by the selection of the associated key.

38. The electronic apparatus of claim 37 wherein said regions are separate icons appearing on said display surface.

25 39. The electronic apparatus of claim 37 wherein said regions are partitioned based on shading differences on said display surface.

40. The electronic apparatus of claim 37 wherein the keypad is a numbered keypad.

30 41. The electronic apparatus of claim 37 wherein the keypad is a keypad with letters on the keypad.

42. The electronic apparatus of claim 37 wherein the keypad is a keypad with graphics on the keys.

43. The electronic apparatus of claim 37 wherein the keypad includes at least two of
5 numbers, letters and graphics on the keys.

44. The electronic apparatus of claim 37, wherein the keypad is a virtual keypad displayed on said display surface.

10 45. The electronic apparatus of claim 44, wherein the keys are selected via a touch screen.

46. The electronic apparatus of claim 37, further comprising:
a navigational element, said navigational element used to switch between
15 displayed regions on said display surface.

47. The electronic apparatus of claim 46, wherein said navigational element is a joystick.

20 48. The electronic apparatus of claim 46, wherein said navigational element is a joypad.

49. The electronic apparatus of claim 37, wherein said electronic apparatus is a mobile phone.

25 50. The electronic apparatus of claim 37, wherein said electronic apparatus is a PDA (Personal Digital Assistant).

51. The electronic apparatus of claim 37, wherein said electronic apparatus is a remote control device configured to operate at least one of a television and television set top
30 box.

52. The electronic apparatus of claim 37, wherein said electronic apparatus is a device configured to operate at least one of a television, television monitor, networked computer and DVR (Digital Video Recorder) box.

5 53. The electronic apparatus of claim 37 wherein the display is organized in a configuration that corresponds to a configuration of the keys on the keypad.

54. A mobile telephone apparatus, said mobile telephone apparatus receiving information transmitted for display on said mobile telephone apparatus, said mobile
10 telephone apparatus comprising:
a display surface for displaying the received information in a visually partitioned manner, said visually partitioned information being presented on said display in at least two regions; and
a numbered keypad containing keys, each of said numbers corresponding to at
15 most a single region of said display, each region being associated with at least one of the numbers in the numbered keypad and representing a choice of an option that may be selected by selecting the associated number, said selection of an associated key triggering an action associated with said choice of an option.

20 55. The mobile telephone apparatus of claim 54 wherein at least one key in said keypad includes more than one number.

56. The mobile telephone apparatus of claim 55 wherein said at least one key includes at least two non-sequential numbers.

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57. The mobile telephone apparatus of claim 54 wherein said regions are separate icons appearing on said display surface.

58. The mobile telephone apparatus of claim 54 wherein said regions are partitioned
30 based on shading differences on said display surface.

59. In an electronic apparatus having a display and a keypad having keys, a method comprising:

displaying information on the display of said electronic apparatus so that the display is visually partitioned in regions, wherein each region is associated with at least one of the keys on the keypad, each of said keys corresponding to at most a single region of said display, said information transmitted for display on said electronic apparatus; and

in response to selection of a selected one of the keys on the keypad, triggering an event, wherein each region is associated with a service and wherein the selection of the selected key triggering the event causes information to be displayed on the display that concerns a service associated with the selected key.

60. The method of claim 59 wherein said regions are separate icons appearing on said display surface.

61. The method of claim 59 wherein said regions are partitioned based on shading differences on said display surface.

62. The method of claim 59, wherein the electronic apparatus is a mobile telephone.

63. The method of claim 59, wherein the keys in the keypad are configured in a pattern and wherein the regions are arranged on the display to match the pattern in which the keys are configured.

64. The method of claim 59, wherein the regions contain graphical information.

65. The method of claim 59, wherein the regions contain text.

66. The method of claim 59, wherein the regions contain text.

67. The method of claim 59, wherein the electronic apparatus is a pager.

68. The method of claim 59, wherein the electronic apparatus is a personal digital assistant (PDA).

69. The method of claim 59, wherein the electronic apparatus is a remote control device
5 configured to operate at least one of a television and television set top box.

70. The method of claim 59, wherein said electronic apparatus is a device configured to
operate at least one of a television, television monitor, networked computer and DVR
(Digital Video Recorder) box.
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71. The method of claim 59, wherein the electronic apparatus is an Internet appliance.

72. The method of claim 59, wherein the step of triggering an event comprises
displaying new information on the display wherein the new information is associated
15 with the selected key on the keypad.

73. The method of claim 59, wherein the new information that is displayed on the
display is visually partitioned into regions that are each associated with respective ones
of the keys on the keypad.
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74. The method of claim 59, wherein there are at least five regions.

75. The method of claim 59, wherein there are nine regions associated with respective
keys numbered one through nine.
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76. The method of claim 59, wherein each of the regions contains a border for visually
delimiting the regions.

77. The method of claim 59, wherein the regions occupy substantially all of the display.
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78. The method of claim 59, wherein each region is associated exclusively with a single
one of the keys in the keypad.

79. The method of claim 59 wherein the keypad is a virtual keypad displayed on said display.

5 80. The method of claim 59 wherein the keypad is a numbered keypad.

81. The method of claim 59 wherein the keypad is a lettered keypad.

82. In a mobile telephone having a display and a numbered keypad having keys, a
10 method comprising:

displaying information on the display of said mobile telephone so that the display is visually partitioned in regions, wherein each region is associated with at least one of the numbers on the numbered keypad, each of said numbers corresponding to at most a single region of said display, said information transmitted for display on said
15 electronic apparatus; and

in response to selection of a selected one of the numbers on the keypad, triggering an event, wherein each region is associated with a service and wherein the selection of the selected number triggering the event causes information to be displayed on the display that concerns a service associated with the selected number.

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83. The method of claim 82 wherein said mobile telephone has at least two numbers on at least one of the individual keys in said keypad.

84. The method of claim 82 wherein the regions are separate icons appearing on said
25 display surface.

85. The method of claim 82 wherein the regions are partitioned based on shading differences on said display surface.

30 86. A storage medium for use in an electronic apparatus having a display and a keypad having keys, said medium holding executable steps for a method, said method comprising:

displaying information on the display of said electronic apparatus so that the display is visually partitioned in regions, wherein each region is associated with at least one of the keys on the keypad, each of said keys corresponding to at most a single region of said display, said information transmitted for display on said electronic
5 apparatus; and

in response to selection of a selected one of the keys on the keypad, triggering an event, wherein each region is associated with a service and wherein the selection of the selected key triggering an event causes information to be displayed on the display that concerns a service associated with the selected key.

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87. The medium of claim 86 wherein the regions are separate icons appearing on said display surface.

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88. The medium of claim 86 wherein the regions are partitioned based on shading differences on said display surface.

89. The medium of claim 86, wherein the electronic apparatus is a mobile telephone.

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90. The medium of claim 86, wherein the keys in the keypad are configured in a pattern and wherein the regions are arranged on the display to match the pattern in which the keys are configured.

91. The medium of claim 86, wherein the regions contain graphical information.

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92. The medium of claim 91, wherein the regions contain text.

93. The medium of claim 86, wherein the regions contain text.

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94. The medium of claim 86, wherein the electronic apparatus is a pager.

95. The medium of claim 86, wherein the electronic apparatus is a personal digital assistant (PDA).

96. The medium of claim 86, wherein the electronic apparatus is a remote control device configured to operate at least one of a television and television set top box.
97. The medium of claim 86, wherein said electronic apparatus is a device configured to
5 operate at least one of a television, television monitor, networked computer and DVR (Digital Video Recorder) box.
98. The medium of claim 86, wherein the electronic apparatus is an Internet appliance.
- 10 99. The medium of claim 86, wherein the step of triggering an event comprises displaying new information on the display wherein the new information is associated with the selected key on the keypad.
100. The medium of claim 86, wherein the new information that is displayed on the
15 display is visually partitioned into regions that are each associated with respective ones of the keys on the keypad.
101. The medium of claim 86, wherein there are at least five regions.
- 20 102. The medium of claim 86, wherein there are nine regions associated with respective keys numbered one through nine.
103. The medium of claim 86, wherein each of the regions contains a border for visually
25 delimiting the regions.
104. The medium of claim 86, wherein the regions occupy substantially all of the display.
105. The medium of claim 86, wherein each region is associated exclusively with a
30 single one of the keys in the keypad.

106. The medium of claim 86 wherein the keypad is a virtual keypad displayed on said display.

107. The medium of claim 86 wherein the keypad is a numbered keypad.

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108. The medium of claim 86 wherein the keypad is a lettered keypad.

109. A storage medium for use in a mobile telephone having a display and a numbered keypad having keys, said medium holding executable steps for a method, said method
10 comprising:

displaying information on the display of said mobile telephone so that the display is visually partitioned in regions, wherein each region is associated with at least one of the numbers on the numbered keypad, each of said numbers corresponding to at most a single region of said display, said information transmitted for display on said

15 electronic apparatus; and

in response to selection of a selected one of the numbers on the keypad, triggering an event, wherein each region is associated with a service and wherein the selection of the selected number triggering an event causes information to be displayed on the display that concerns a service associated with the selected number.

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110. The medium of claim 109 wherein said mobile telephone has at least two numbers on at least one of the individual keys in said keypad.

111. The medium of claim 109 wherein the regions are separate icons appearing on said
25 display surface.

112. The medium of claim 109 wherein the regions are partitioned based on shading differences on said display surface.